



# Challenging the Standard Model with LHCb data.

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### Tuesday, 25 October 2016, 16:45 h, DESY Auditorium



Since the LHC startup in 2009, the LHCb experiment at CERN has recorded the world's largest sample of beauty mesons. Their decays can be precisely measured with the LHCb detector, thanks to its unique geometry as forward spectrometer. Rare leptonic and semi-leptonic beauty decays are excellent probes for yet unknown heavy particles. Measurements of decay rates and angular distributions of these processes can be used to test the Standard Model of particle physics with unprecedented sensitivity. This seminar puts a focus on recent measurements of the LHCb collaboration in these decay modes. The existing anomalies in today's flavour data are discussed, including potential interpretations of the results as first cracks in the Standard Model.

#### Coffee, tea and cookies will be served at 16:30h

## • After the seminar there is a chance for private discussions with the speaker over wine and pretzels



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